ORIGINAL RESEARCH

Impact of an Expanded Hospital Recognition Program for Heart Failure Quality of Care

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***Background*—**In 2009, the Get With The Guidelines–Heart Failure program enhanced the standard recognition of hospitals by offering additional recognition if hospitals performed well on certain quality measures. We sought to determine whether initiation of this enhanced recognition opportunity led to acceleration in quality of care for all hospitals participating in the program.

***Methods and Results*—**We examined hospital-level performance on 9 quality-of-care (process) measures that were added to an existing recognition program (based on existing published performance measures). The rate of increase in use over time 6 months to 2 years after the start of the program was compared with the rate of increase in use for the measures during the 18-month period prior to the start of the program. Use increased for all 9 new quality measures from 2008 to 2011. Among 4 measures with baseline use near or lower than 50%, a statistically significant greater increase in use during the program was seen for implantable cardioverter defibrillator use (program versus preprogram use: odds ratio 1.14, 95% CI 1.06 to 1.23). Among the 5 measures for which baseline use was 50% or higher, the increase in influenza vaccination rates actually slowed. There was no evidence of adverse impact on the 4 established quality measures, a composite of which actually increased faster during the expanded program (adjusted odds ratio 1.08, 95% CI 1.01 to 1.15).

***Conclusions*—**A program providing expanded hospital recognition for heart failure had mixed results in accelerating the use of 9 quality measures. **(*J Am Heart Assoc*. 2014;3:e000950 doi: 10.1161/JAHA.114.000950)**

Key Words: awards • healthcare quality assessment • healthcare quality indicators • heart failure

The American Heart Association's Get With The Guidelines–Heart Failure (GWTG-HF) program has recognized hospitals for quality of care using achievement (performance) measures for heart failure. These measures include discharge prescription of angiotensin-converting enzyme inhibitors or angiotensin receptor blockers and beta blockers if the left ventricular ejection fraction (LVEF) is reduced, measurement of left ventricular systolic function, and discharge instructions for eligible patients without documented contraindications or other exceptions. Performance on these achievement measures has reached a high level.[1] In contrast, performance on other guideline recommendations for medication, device, and vaccination use (deemed quality measures but not achievement measures) has been suboptimal to poor.[2,3]

To further improve heart failure care, the GWTG-HF program introduced an additional recognition program, the Plus Awards, in 2009. This program was designed to provide an additional incentive by recognizing hospitals meeting 75% compliance on any 4 of 9 additional quality measures. The new measures included use of an aldosterone antagonist, a guideline-recommended beta blocker, hydralazine and nitrate, anticoagulation for atrial fibrillation, an implantable cardioverter defibrillator (ICD), cardiac resynchronization therapy, influenza vaccination, pneumococcal vaccination, and prophylaxis for deep venous thrombosis in appropriate candidates.

The purpose of this research is to evaluate the impact of the Plus Awards on overall quality of heart failure care for hospitals participating in the GWTG-HF program. Specifically, we tested the hypothesis that performance on the 9 quality measures for heart failure improved at a faster rate following implementation of the Plus Awards program than prior to the Plus Awards. A secondary hypothesis was that the rate of increase in use of existing achievement measures did not change with the launch of the Plus Awards.

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Received March 13, 2014; accepted July 14, 2014.

Methods

Plus Awards Intervention

Prior to the introduction of the Plus Awards, the GWTG-HF recognition program (Achievement Award) acknowledged hospitals reaching 85% compliance with each of the following achievement measures: discharge instructions, measurement of LVEF, angiotensin-converting enzyme inhibitor or angiotensin receptor blocker at discharge if LVEF is <40%, and beta blocker at discharge if LVEF is <40. For a hospital to also be recognized by the new Plus Awards program, it must both receive the established Achievement Award and demonstrate 75% compliance for 12 months consecutively on 4 of 9 heart failure quality measures: aldosterone antagonist at discharge, anticoagulation for atrial fibrillation, cardiac resynchronization therapy placed or prescribed at discharge, deep venous thrombosis (DVT) prophylaxis, evidence-based specific beta blockers (carvedilol, metoprolol succinate, or bisoprolol) at discharge, hydralazine and nitrate combination for those of African descent, ICD placed or prescribed at discharge for patients, influenza vaccination during flu season, and pneumococcal vaccination for appropriate candidates. Prior to the initiation of the Plus Awards, hospitals were provided with details of their performance on these measures, but there was no public recognition of high performers.

Study Population

We identified all patients hospitalized with heart failure from 2008 through September 2011 (N=106 154). We excluded patients without laboratory data reported (n=23 949) and those from hospitals that did not report medical history data routinely (n=23 674 from 116 hospitals), patients who died during hospitalization (n=2399), and those who were transferred to another healthcare or acute care facility or who left against medical advice (n=17 526). From this group, we compared 16 138 patients admitted before implementation of the Plus Awards program (preprogram period: January 2008 to June 2009) with 16 661 patients admitted after the Plus Awards program had been established (program period: January 2010 to September 2011). Patients admitted during the transition period (July 2009 to December 2009, n=5717) were not evaluated. The mean age of those excluded due to lack of laboratory values (69.6 years) was comparable to the mean age of the included population (69.4 years).

Outcomes

The primary outcomes were use of the 9 quality measures with appropriate candidates. Secondary outcomes were use of the 4 existing achievement measures (discharge instructions, measure of LVEF, angiotensin-converting enzyme inhibitor or angiotensin receptor blocker at discharge if LVEF is <40%, beta blocker at discharge if LVEF is <40%), 2 composite measures (average across available measures), and a defect-free care measure.

All participating institutions were required by the GWTG program to comply with local regulatory and privacy guidelines and, if required, to secure institutional review board approval. Because data were used primarily at the local site for quality improvement, sites were granted a waiver of informed consent under the common rule. The Duke Clinical Research Institute in Durham, North Carolina, served as the data analysis center, and institutional review board approval was granted to analyze aggregate deidentified data for research purposes.

Statistical Analysis

Patient and hospital characteristics and achievement and quality measures were summarized descriptively for the preprogram and program periods. *P* values were based on Pearson chi-square tests or Wilcoxon tests. Logistic regression was used to assess the relationship between increasing calendar time in months and odds of outcome. We allowed separate relationships to be estimated for the preprogram and program periods by fitting a linear spline relationship. This model allows the estimated log-odds of outcome to be continuous in calendar time. Generalized estimating equation methods with an exchangeable working correlation matrix were applied to account for the correlation of patients within sites. Adjusted models account for differing hospital and patient characteristics over time. Characteristics included in the models were patient demographics (age, sex, race) insurance (other, Medicare, Medicaid, no insurance), medical history (atrial fibrillation, atrial flutter, chronic obstructive pulmonary disease hyperlipidemia, hypertension, peripheral vascular disease, prior myocardial infarction, cerebral vascular accident or transient ischemic attack, past heart failure, anemia, renal insufficiency, smoking, ischemic heart disease) hospital characteristics (bed size, region, academic affiliation, heart transplant, urban or rural location), and laboratory results (body mass index, hemoglobin, serum creatinine, blood urea nitrogen, and sodium). A secondary analysis examined differences in use of the 9 quality metrics between Plus Awards and non-Plus Awards hospitals (n=27 305 during the Plus Awards program period). For each outcome, we provide the odds ratio (OR; with 95% CI and *P* value) per 3 calendar months as the rate of improvement during the preprogram period, the OR (with 95% CI and *P* value) per 3 months after program initiation, and a *P* value comparing these to evaluate whether the rate of improvement significantly changed after program initiation.

Missing hospital characteristics were <1%, and patients from these hospitals were excluded in multivariable models. The primary analysis included patients with complete laboratory data. All *P* values are 2-sided, with $P<0.05$ considered statistically significant. Analyses were performed using SAS software (version 9.2; SAS Institute).

Results

The primary analysis compared treatment for patients from 87 hospitals who were hospitalized in the preprogram period (January 2008 to June 2009, n=16 138) or the program period (January 2010 to September 2011, n=16 661). Patient and hospital characteristics for both groups are displayed in Table 1. In general, differences in patient and hospital characteristics over time were small but often statistically significant due to the large sample size. Use of the 9 quality metrics are shown over time in Figure 1A and 1B. Use increased for all measures from before initiation to after initiation of the Plus Awards program. The greatest increases from 2008 to 2011 were noted for influenza and pneumococcal vaccinations, prophylaxis for DVT, and anticoagulation for atrial fibrillation.

The unadjusted and adjusted rates of increase per quarter for the preprogram period were compared with those of the established program period for the 9 quality measures (Table 2). Adjustment had little impact on the observed ORs and confidence intervals. Aldosterone antagonist use significantly increased during both the preprogram and program periods. The increase in use over time was significant in just the preprogram period for anticoagulation for atrial fibrillation, influenza vaccination, and pneumococcal vaccination. Significant increases in use during the program period were noted for the ICD and cardiac resynchronization therapy placement or prescription at discharge and DVT prophylaxis. Among 4 measures with baseline use near or lower than 50%, statistically significant greater use during the program compared with the preprogram period was seen only for ICD placement or prescription at discharge (program versus preprogram use: adjusted OR 1.14, 95% CI 1.06 to 1.23). Among the 5 measures where baseline use was 50% or higher, the increase in influenza vaccination rates slowed significantly (adjusted OR 0.70, 95% CI 0.56 to 0.89) during the program period.

Table 1. Patient and Facility Characteristics of Patients Before and After Initiation of the Enhanced Recognition Program

Patient Characteristic	Preprogram (n=16 138)	Program (n=16 661)	*P* Value
Age, y (mean±SD)	69.3±15	69.6±15	0.07
Female sex	7086 (44)	7694 (46)	0.001
Race			<0.0001
White	10 383 (64)	10 066 (60)	
Black	3514 (22)	3604 (22)	
Asian	170 (1.1)	423 (2.5)	
Native American	49 (0.3)	127 (0.8)	
Pacific Islander	37 (0.2)	114 (0.7)	
Hispanic	1596 (9.9)	1910 (11)	
Hypertension	12 888 (80)	13 313 (80)	0.54
Diabetes (insulin treated)	3433 (21)	3555 (21)	0.97
Diabetes (noninsulin treated)	3705 (23)	4123 (24)	0.0003
Atrial fibrillation (chronic or recurrent)	4826 (30)	5431 (33)	<0.0001
Coronary artery disease	8005 (50)	8304 (50)	0.32
Dialysis (chronic)	694 (4.3)	757 (4.6)	0.69
Smoking	3212 (20)	3234 (19)	0.27
Systolic blood pressure, mm Hg (mean±SD)	142±31	143±31	0.11
BNP, pg/mL (mean±SD)	1106±1125	1098±1109	0.76
Left ventricular ejection fraction, % (mean±SD)	38±17	39±17	<0.0001
Length of stay, days (mean±SD)	5.0±5.9	5.1±5.2	0.0005
Discharge to home	15 749 (98)	16 064 (96)	<0.0001
Facility characteristic			
Bed size, n (mean ± SD)	467±190	439±189	<0.0001
Academic hospital	10 685 (66)	9733 (58)	<0.0001
Region			<0.0001
West	2270 (14)	2923 (18)	
South	5267 (33)	5256 (32)	
Midwest	3348 (21)	4171 (25)	
Northeast	5253 (33)	4126 (25)	
Rural location	356 (2.2)	309 (1.9)	0.04

Data are presented as n (%) unless otherwise indicated. BNP indicates brain natriuretic peptide.

Program Recognition and Quality Measures

A total of 44 hospitals (51%) were publicly recognized by the new Plus Awards program for meeting a performance level of 75% or higher on 4 of the 9 quality measures (Figure 2). Differences between award and nonaward hospitals were greatest for low-risk therapies (vaccination and DVT prophylaxis) but limited for more complicated treatments (aldosterone antagonist and hydralazine–nitrate combination for those of African descent).

Impact on Established Measures of Quality

There was no evidence of adverse impact on the 4 established achievement measures (Table 3, Figure 3); a composite of

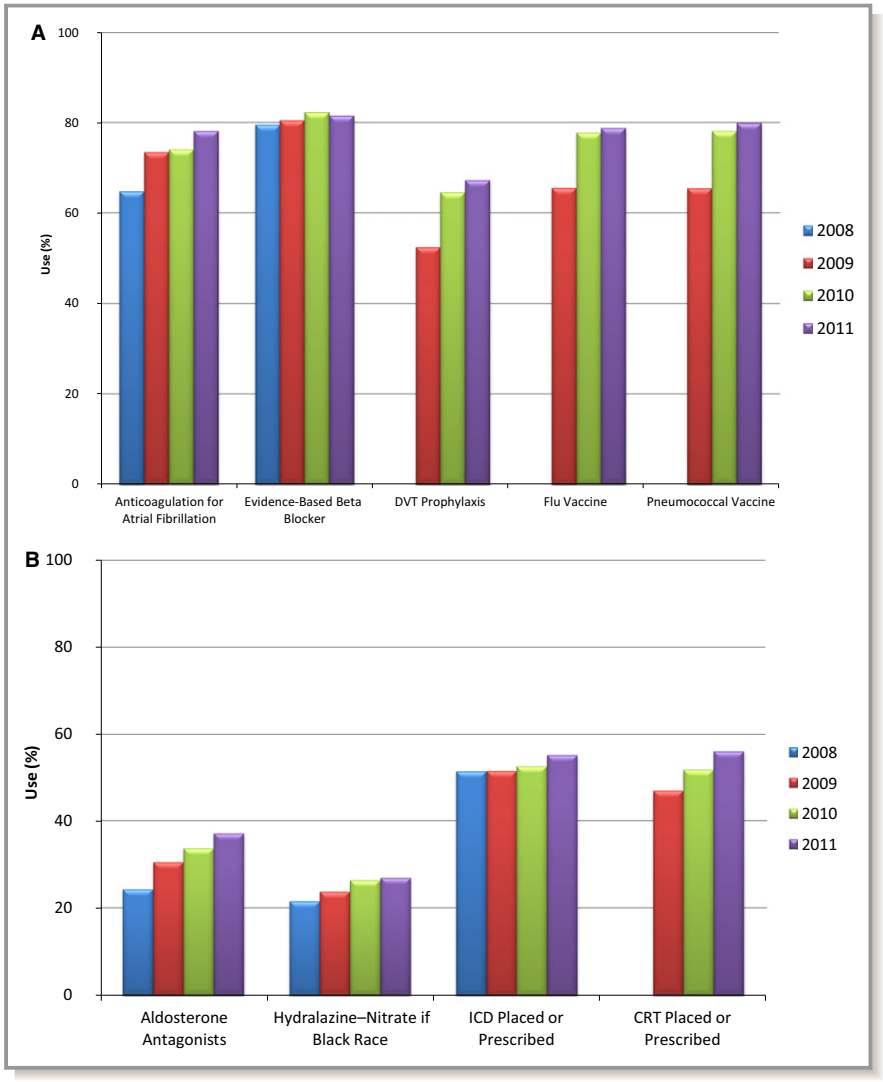

Figure 1. Trends in use of the quality metrics targeted as part of an expanded hospital recognition program from 2008 to 2011 are shown. The program was launched in July 2009. A, Trends for 5 measures with use near or higher than 60%. B, Data trends for 4 measures with low use. Use increased to some degree for all quality measures. *P* values for trend are <0.0001 for all comparisons over time except for ICD use (*P*=0.005). CRT indicates cardiac resynchronization therapy; DVT, deep venous thrombosis; ICD, implantable cardioverter defibrillator.

defect-free care actually increased faster during the program period than during the preprogram period (adjusted OR 1.08, 95% CI 1.01 to 1.15).

Discussion

A learning healthcare system will rigorously evaluate not just treatments but all interventions designed to improve care. Accordingly, when the enhanced hospital recognition program (Plus Awards) was created by the American Heart Association's GWTG-HF program, an analysis of impact on quality of patient care was part of the design. The program realized that such an analysis would be underpowered for small to moderate benefits but that it was still a worthwhile effort toward understanding the impact of quality-of-care interventions. Although the award program generated interest among hospitals, and many received awards, our study showed mixed results regarding the impact on all hospitals. We observed uptake of some targeted therapies accelerating after recognition (ICD use) and others decelerating (vaccinations).

Public reporting and recognition are believed to improve quality of care[4] by either directing patients to the best hospitals (with no change in quality at each hospital) or by prompting all hospitals to improve the quality of their care. Unfortunately, few recognition programs have rigorously evaluated their impact on care overall. Many programs have

Table 2. Unadjusted and Adjusted Changes in Use of 9 Quality Measures Targeted in the Expanded Recognition Program (n=38 516)

Outcome	Variable	Unadjusted				Adjusted+			
		OR	Lower 95% CI	Upper 95% CI	*P* Value	OR	Lower 95% CI	Upper 95% CI	*P* Value
Aldosterone antagonist for LVSD at discharge	Preprogram (per quarter)	1.064	1.025	1.103	0.001	1.063	1.022	1.105	0.002
	Program (per quarter)	1.072	1.033	1.111	<0.001	1.070	1.028	1.114	<0.001
	Program vs preprogram				0.799				0.829
Anticoagulation for atrial fibrillation	Preprogram (per quarter)	1.052	1.015	1.090	0.006	1.059	1.016	1.104	0.007
	Program (per quarter)	1.031	0.976	1.088	0.274	1.037	0.978	1.100	0.222
	Program vs preprogram				0.584				0.607
Evidence-based specific beta blockers for LVSD	Preprogram (per quarter)	1.026	0.992	1.060	0.137	1.034	0.997	1.071	0.069
	Program (per quarter)	1.024	0.983	1.066	0.252	1.026	0.981	1.073	0.259
	Program vs preprogram				0.956				0.832
Hydralazine and isosorbide dinitrate combination for LVSD at discharge	Preprogram (per quarter)	1.036	0.983	1.092	0.192	1.003	0.937	1.074	0.935
	Program (per quarter)	1.035	0.978	1.094	0.234	1.034	0.978	1.093	0.235
	Program vs preprogram				0.981				0.539
ICD placed or prescribed at discharge for patients with LVEF ≤35%	Preprogram (per quarter)	0.982	0.937	1.029	0.457	0.960	0.912	1.010	0.113
	Program (per quarter)	1.064	1.018	1.112	0.006	1.075	1.022	1.131	0.005
	Program vs preprogram				0.006				<0.001
CRT-D or CRT-P placed or prescribed at discharge (from year 2009)	Preprogram (per quarter)	0.958	0.810	1.134	0.620	0.962	0.729	1.268	0.782
	Program (per quarter)	1.069	1.014	1.128	0.014	1.122	1.042	1.208	0.002
	Program vs preprogram				0.257				0.299
DVT prophylaxis (from year 2009)	Preprogram (per quarter)	1.082	0.920	1.271	0.342	1.150	0.916	1.443	0.229
	Program (per quarter)	1.062	1.032	1.094	<0.001	1.141	1.063	1.226	<0.001
	Program vs preprogram				0.827				0.952
Influenza vaccination during flu season (from year 2009)	Preprogram (per quarter)	2.418	1.099	5.322	0.028	2.832	1.445	5.550	0.002
	Program (per quarter)	0.983	0.934	1.035	0.520	0.988	0.928	1.052	0.704
	Program vs preprogram				0.029				0.003
Pneumococcal vaccination (from year 2009)	Preprogram (per quarter)	2.225	1.314	3.768	0.003	2.473	1.521	4.019	<0.001
	Program (per quarter)	1.001	0.874	1.147	0.984	1.040	0.928	1.166	0.500
	Program vs preprogram				0.002				<0.001

+Variables in the model: age, sex, white race, insurance, medical history of atrial fibrillation, atrial flutter, chronic obstructive pulmonary disease or asthma, diabetes, hyperlipidemia, hypertension, peripheral vascular disease, prior myocardial infarction, cerebral vascular accident or transient ischemic attack, heart failure, anemia, renal insufficiency, smoking, ischemic history, hospital size, hospital type, region, heart transplant, urban or rural location. CRT-D indicates cardiac resynchronization therapy–defibrillator; CRT-P indicates cardiac resynchronization therapy–pacemaker; DVT, deep venous thrombosis; ICD, implantable cardioverter defibrillator; LVEF, left ventricular ejection fraction; LVSD, left ventricular systolic function; OR, odds ratio.

demonstrated that recognized hospitals have better outcomes than nonrecognized hospitals. Hospitals noted for nursing excellence, for example, were shown to have better outcomes for low-birth-weight infants than hospitals that were not recognized.[5] Hospitals participating in LeapFrog efforts also had improvements in quality of care,[6] and hospitals recognized by the American Heart Association's GWTG-HF initial award program had better outcomes than those not recognized[7]; however, it is not clear whether recognition just identified better hospitals without affecting care. Although identification of high-quality hospitals has value, without an analysis of care for all hospitals, one cannot determine the full impact of any public reporting or hospital recognition program.

Given the underlying societal trends toward increasing use of most guideline-recommended therapies, it is important to examine the change in rate of increase with any intervention designed to improve care. A simple before-and-after analysis would conclude that use of recommended treatments increased with the new GWTG-HF recognition program (Plus

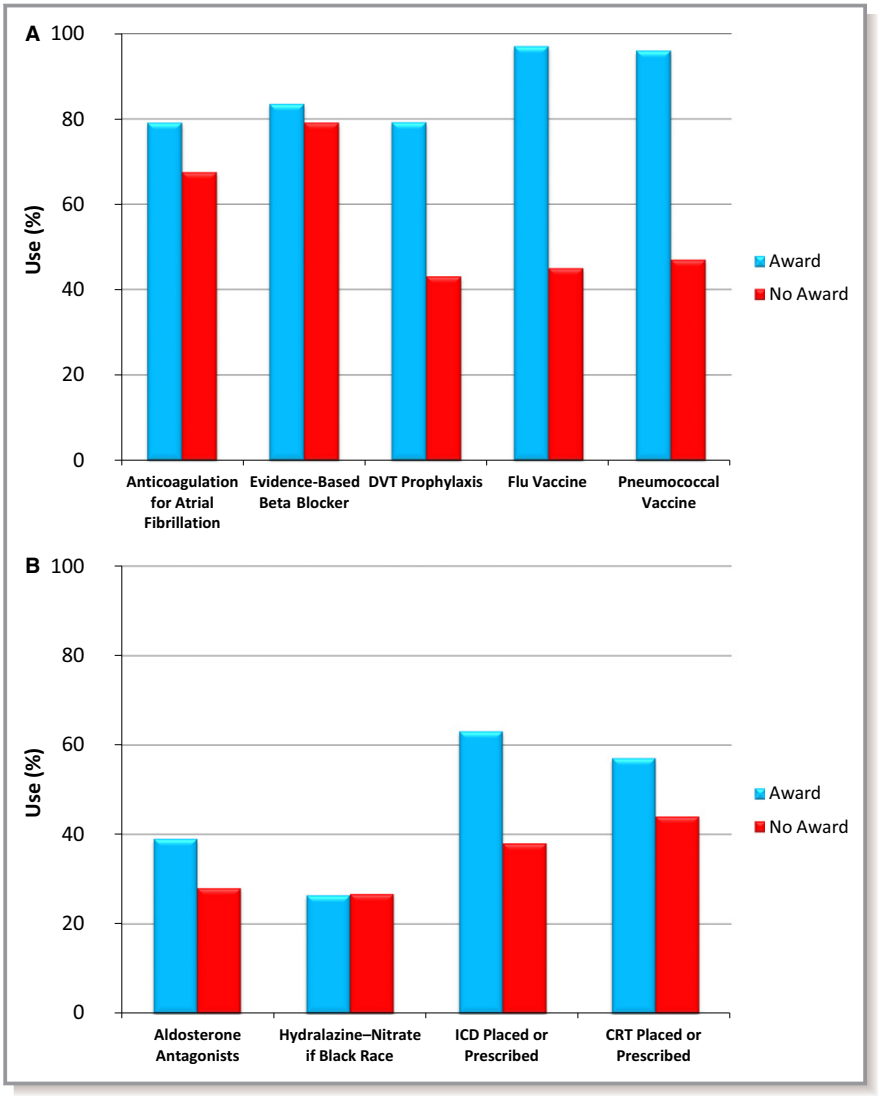

Figure 2. Comparison of the use of 9 quality measures for those hospitals receiving Plus Awards and other hospitals. Data are limited to patients during the program period (n=27 305). *P* values are <0.0001 for all comparisons except hydralazine–nitrate use (*P*=0.83). CRT indicates cardiac resynchronization therapy; DVT, deep venous thrombosis; ICD, implantable cardioverter defibrillator.

Awards); however, the rate of increase of most therapies was not significantly different before and after initiation of the program.

There are several potential reasons for our failure to see a significant change in the rate of improvement with the Plus Awards. It is possible that the GWTG-HF performance Achievement Award remained the primary motivator and incentive for improvement and that hospitals and hospital teams did not view the Plus Awards as sufficient incentive to motivate change. It is also possible that self-selection of 4 of 9 quality measures may not have been the most effective way to construct the awards. Furthermore, measuring the rate of change of an intervention is complicated because of unstable baselines and floor and ceiling effects. It is plausible that the rate of increase of any new healthcare intervention will be slow immediately following its introduction, accelerate as the intervention is adopted by more facilities, and finally decelerate as a ceiling is reached. The impact of a program may be greatest for care strategies that are not at the extremes of use. We found some evidence for this hypothesis with ICD therapy, which started with use lower than 50% and increased faster following the establishment of the recognition program, whereas the reverse was true for influenza vaccination, which was already near 80% usage before establishment of the recognition program.

Public reporting of hospital quality may have a greater impact than recognition of top hospitals because facilities have an incentive not to be labeled as “poor.” The Joint

Table 3. Unadjusted and Adjusted Changes in Use of 4 Existing Achievement Measures That Remained in Place During the Expanded Recognition Program

Outcome	Variable	Unadjusted				Adjusted+			
		OR	Lower 95% CI	Upper 95% CI	*P* Value	OR	Lower 95% CI	Upper 95% CI	*P* Value
ACE/ARB for LVSD at discharge	Preprogram (per quarter)	1.013	0.955	1.075	0.660	1.034	0.971	1.102	0.300
	Program (per quarter)	1.024	0.958	1.095	0.479	1.019	0.948	1.094	0.614
	Program vs preprogram				0.812				0.754
Beta blocker for LVSD at discharge	Preprogram (per quarter)	1.028	0.961	1.099	0.428	1.033	0.960	1.112	0.388
	Program (per quarter)	1.118	1.035	1.207	0.005	1.088	0.997	1.187	0.060
	Program vs preprogram				0.087				0.325
Discharge instructions	Preprogram (per quarter)	0.985	0.921	1.053	0.652	0.984	0.902	1.073	0.714
	Program (per quarter)	1.035	0.936	1.144	0.504	1.085	0.975	1.206	0.135
	Program vs preprogram				0.345				0.102
Documentation of LV function	Preprogram (per quarter)	0.990	0.929	1.056	0.768	1.047	0.953	1.150	0.339
	Program (per quarter)	1.127	1.053	1.206	<0.001	1.104	1.003	1.216	0.044
	Program vs preprogram				0.002				0.353
Composite for defect-free care	Preprogram (per quarter)	0.971	0.924	1.019	0.234	0.990	0.945	1.036	0.656
	Program (per quarter)	1.064	0.994	1.140	0.076	1.080	1.013	1.152	0.019
	Program vs preprogram				0.012				0.011

+Variables in the model: age, sex, white race, insurance, medical history of atrial fibrillation, atrial flutter, chronic obstructive pulmonary disease or asthma, diabetes, hyperlipidemia, hypertension, peripheral vascular disease, prior myocardial infarction, cerebral vascular accident or transient ischemic attack, heart failure, anemia, renal insufficiency, smoking, ischemic history, hospital size, hospital type, region, heart transplant, urban or rural location. ACE indicates angiotensin-converting enzyme; ARB, angiotensin receptor blocker; LV, left ventricle; LVSD, left ventricular systolic function.

Commission and the Centers for Medicare and Medicaid Services have measured and publicly reported hospital quality of care for more than 10 years. Initial reports demonstrated that quality improved during the first several years of the program across all hospitals[8]; however, later studies that evaluated rates of increase before the start of public reporting

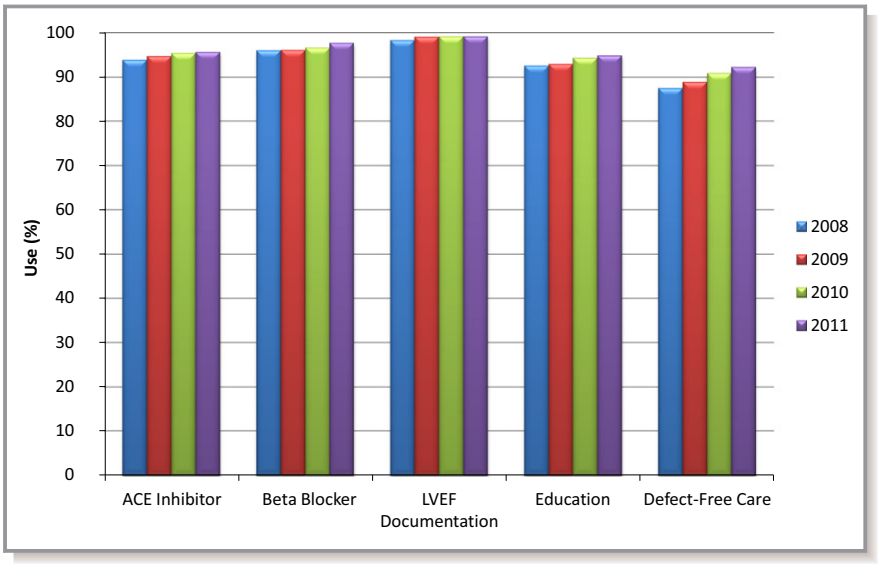

Figure 3. Trends in the use of existing achievement measures that form the primary basis for hospital recognition. No evidence showed that hospitals switched focus away from established measures when promotion of the quality measures began in July 2009. All comparisons are $P<0.0001$. ACE indicates angiotensin-converting enzyme; LVEF, left ventricular ejection fraction.

found that the increases observed during public reporting were no different from prior trends.[9] A similar experience was observed for New York State and its public reporting of mortality rates for coronary artery bypass grafting. When compared with prior years, public reporting was associated with a decline in coronary artery bypass grafting mortality[10]; however, rates of decrease were comparable to those of other states without public reporting.[11]

A concern about public reporting or recognition is that facilities may focus on meeting those measures for which they are evaluated and allowing care to suffer in other areas. Public reporting may also lead to unintended consequences if providers avoid treating high-risk patients. Such a concern was raised by the public reporting of percutaneous coronary intervention mortality with ST-segment elevation myocardial infarction in New York State. Patients with ST-segment elevation myocardial infarction and shock were 50% less likely to undergo percutaneous coronary intervention in New York hospitals compared with hospitals in other states without public reporting.[12] In our study, there was the potential that hospitals would focus less on the more established quality measures for heart failure care (achievement measures; Table 3) while they addressed the quality measures that were part of the new recognition program. Fortunately, no decreased compliance with the established measures was observed.

Increases in all quality measures were observed over time; however, the use of several treatments remained low, including use of hydralazine–nitrate combination for patients of African descent and aldosterone antagonists in appropriate candidates. The reasons for the lack of uptake are likely multifactorial and most likely differed for different therapies. In contrast, hospitals were able to achieve a high rate of compliance with vaccinations and DVT prophylaxis, treatments that are relatively benign and easier to implement through system changes.

Limitations

This study has several potential limitations. The effect of hospital recognition may be small, and the available sample size (fewer than 100 hospitals) was inadequate to detect small to moderate differences in changes in treatment use. The nonstable baseline and potential ceiling effects also made it difficult to determine the impact of the program. The quality measures evaluated by the new recognition program were already reported, privately, to the individual hospitals. Consequently, the hospitals may have already implemented programs to improve use before the new recognition program was implemented. The awards system may have been inadequate to improve all targeted care. The GWTG-HF program used a threshold of 75% for any 4 of 9 measures that may have been too easy to meet for some care practices with a low risk of complications (vaccinations) yet too challenging for other care practices that require monitoring to be used safely (aldosterone antagonist). Hospitals participating in the GWTG-HF program may be more focused on quality of care than other hospitals. Hospitals participating in the GWTG-HF program, for example, had higher compliance with quality-of-care measures than those not participating, and they also had slightly lower readmission rates.[1] Finally, in this study, we were unable to determine why certain treatments were not used in eligible patients, and this should be investigated in future research.

In summary, our study evaluated the impact of an augmented hospital recognition program as part of the GWTG-HF program. Although our study did not show that use of recommended treatments uniformly accelerated following onset of the program, there are several reasons for optimism. First, some of the measures did show accelerated improvement. Second, many hospitals chose to apply for the new awards, indicating interest in these quality measures. Third, 44 of 87 hospitals received the new award and reached a high level on several measures in a short period of time. Fourth, there was continued improvement in the achievement measures with no erosion in performance on any of these key metrics. The ongoing challenge for the program is to spread high-quality, evidence-based practices to all hospitals.

Sources of Funding

The Get With The Guidelines–Heart Failure (GWTG-HF) program is provided by the American Heart Association. GWTG-HF has been funded in the past through support from Medtronic, GlaxoSmithKline, Ortho-McNeil, and the American Heart Association Pharmaceutical Roundtable. Dr Heidenreich is supported by a grant from the Veteran Administration's Quality Enhancement and Research Initiative 04-326.

Disclosures

Dr Fonarow: Research AHRQ (significant), NIH (significant); Consultant: Novartis (significant), Medtronic (modest), Gambro (modest), Amgen (modest), Bayer (modest). The other authors have nothing to disclose.

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